REMARKS

The rejection of claim 9 is respectfully traversed because the claim is thought to be reasonably clear as originally presented. However, claim 9 is amended to expedite prosecution.

Claims 11 and 15 are amended to clarify the invention and not for purposes of patentability.

New claims 16-21 are added to claim the invention in alternative language.

Claims 1-21 remain pending in the application. Reconsideration and allowance of the application are respectfully requested.

The Office Action does not establish that claims 1-10 and 12-14 are unpatentable under 35 USC §103(a) over US patent number 5,630,049 to Cardoza (hereinafter "Cardoza"), in view of US patent number 6,675,218 to Mahler et al. (hereinafter "Mahler"). The rejection is respectfully traversed because the Office Action fails to show that all the limitations are suggested by the references, fails to provide a proper motivation for modifying the teachings of Cardoza with teachings of Mahler, and fails to show that the combination could be made with a reasonable likelihood of success.

As to claim 1, the cited portions of the Cardoza-Mahler combination neither show nor suggest a network interface card detecting debugger messages in a protocol stack including physical through application layers, and directing the debugger messages to a debugger network component in the network interface card. The cited section of Cardoza shows the messages being routed in a device driver (col. 9, ll. 16-37), which is generally thought to execute on a processor along with the operating system, not on a NIC. Furthermore, there is no apparent suggestion in either Cardoza or Mahler, nor does the Office Action cite any purported suggestion, of any type of debugger network component being in a network interface card and debugger messages being directed to that debugger network component.

Relative to the network interface card implementing a protocol stack, the sections of Mahler cited by the Office Action clearly neither teach nor suggest this feature. Specifically, the claims set forth that the protocol stack is implemented in the network interface card, and the protocol stack detects and directs the debugger messages. The cited portion of Mahler teaches otherwise. Mahler describes the kernel code implementing portions of the protocol stack, or alternatively, implementing new protocols in user space. Those skilled in the art will recognize that protocol functions implemented in the kernel or user space are clearly not suggestive of functions implemented in a network interface card.

The alleged motivation for combining Mahler with Cardoza is improper. The alleged motivation for modifying Cardoza with Mahler is that "it would have been obvious ... to implement a kernel logic and network component at the server system by Cardoza so as to include therein a protocol stack as taught by Mahler (and suggested by Cardoza) so as to be able to perform kernel debugging activities and message routing control such that packets coming from the internet medium can be differentiated and filtered according to the protocol layer (as suggested by Cardoza) involved and thereby render the kernel task of analyzing and processing of messages much more efficient, error-free and focused as suggested by Mahler's approach." This alleged motivation is unfounded and conclusory.

As explained above, Mahler does not suggest a protocol stack in a network interface card and the claimed processing associated therewith. Thus, the reason given to support the alleged motivation is unsupported by the teachings of Mahler.

The alleged motivation is also improper as being conclusory. The Office Action states that the combination would provide "more efficient, error-free and focused" analysis and processing of messages. However, no evidence is provided that Cardoza's system is inefficient, is prone to errors, or out-of-focus in its processing of error messages. Furthermore, the Office Action provides no guidance to give meaning to what is intended by "efficient" and "focused" processing of messages. Therefore, the alleged motivation is improper.

The limitations of claims 2-10 and 12-14 are further based on processing performed by and related to a debugger network component in the network interface card and the protocol stack on the network interface card. Thus, the rejections of these claims are traversed for similar reasons set forth above in regards to claim 1. For example, claim 2 includes limitations of communicating between a debugger control component in a kernel and the debugger network component in the network interface card. The Office Action alleges that the Cardoza-Mahler combination implicitly teaches these limitations. However, the cited teaching simply cites messages from the network to the host computer. There is no evidence cited, nor does the Office Action explain how messages to a host computer would imply a debugger network component on a network interface card communicating with a debugger control component in a kernel. The general teachings of the Cardoza-Mahler combination do not suggest the specific claim limitations. The rejections of claims 3-10 and 12-14 are similarly deficient.

As to the alleged obviousness of claim 4, it is respectfully submitted that even though *general* usage of port numbers may be well known, there is no evidence provided to suggest the *specific* limitations a port number being assigned to a debugger network component in a network interface card, and the port number for the debugger network component being used by the protocol stack in the network interface card to determine debugger messages. Furthermore, the alleged motivation for modifying the Cardoza-Mahler combination is based on hindsight.

The rejection of claim 6 fails to recognize and address the limitations of the debugger network component that is in the network interface card writing the debugger messages to the server memory. The Office Action simply cites that Cardoza saves debugger messages in server memory without recognizing or addressing the limitations of the debugger network component in the network interface card doing the writing. Thus, the rejection of claim 6 is improper.

The apparatus of claim 8 and the computing arrangement of claims 9-10 and 12-14 include limitations similar to those discussed above, and the rejection of claims 9-10 and 12-14 is traversed for at least those reasons.

The rejection of claims 1-10 and 12-14 over the Cardoza-Mahler combination should be withdrawn because the Office Action fails to show all the limitations are suggested by the combination, fails to provide a proper motivation for combining the references, and fails to show that the combination could be made with a reasonable likelihood of success.

The Office Action fails to show that claims 11 and 15 are unpatentable under 35 USC §103(a) over the Cardoza-Mahler combination as applied to claims 10 and 14, and further in view of US patent number 5,935,262 to Barrett et al. (hereinafter "Barrett"). The rejection is respectfully traversed because the Office Action fails to show that all the limitations are suggested by the references, fails to provide a proper motivation for modifying the teachings of Cardoza with teachings of Mahler, and fails to show that the combination could be made with a reasonable likelihood of success.

The limitations of claims 11 and 15 that are not suggested by the Cardoza-Mahler-Barrett combination include a first shared memory interface coupled to the debugger control component; and a second shared memory interface coupled to the debugger network component, wherein the first and second shared memory interfaces are configured to write the debugger messages and client messages to a shared memory area. Barrett's shared memory is apparently in the network expansion device, not in a server. Furthermore, Barrett's memory

is not shared by a debugger component in a network interface card and debugger control in the operating system. Thus, the limitations of the claims are not shown to be suggested by the Cardoza-Mahler-Barrett combination.

The alleged motivation for making the Cardoza-Mahler-Barrett combination is improper for being conclusory and lacking supporting evidence. The alleged motivation for making the combination is "that having information commonly available for access (as in share storage) for debug analysis from the standpoint of the debugger control component as well as the network component as seen by the host client would enhance the bi-directional manner by which messages or program data as suggested by Cardoza can be accessed or stored thereby leading to fast adjustment and possibly exception handling by the host's administrative operations, i.e. enabling more dynamic controlling or time-efficient support of the debug as taught by Barrett." The motivation is improper because no evidence is provided to indicate that the Cardoza-Mahler combination impedes "adjustment" or "exception handling." Nor does the Office Action provide evidence that the Cardoza-Mahler combination does not provide "dynamic controlling or time-efficient support of the debug." Furthermore, the Office Action does not explain the meaning of these ambiguous advantages. Therefore, the alleged motivation is improper.

The rejection of claims 11 and 15 over the Cardoza-Mahler-Barrett combination should be withdrawn because the Office Action fails to show all the limitations are suggested by the combination, fails to provide a proper motivation for combining the references, and fails to show that the combination could be made with a reasonable likelihood of success.

Withdrawal of the rejection and reconsideration of the claims are respectfully requested. If the examiner has any questions or concerns, a telephone call to the undersigned is welcome.

No extension of time is believed to be necessary for consideration of this response. However, if an extension of time is required, please consider this a petition for a sufficient number of months for consideration of this response. If there are any additional fees in connection with this response, please charge Deposit Account No. 50-0996 (HPCO.059PA).

Respectfully submitted,

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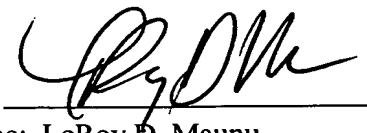
By: 

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